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### Textbook only: Computers in or Near the Classroom Lecture format using a textbook: One to five computers: Six to 10 computers: Lecture format using PowerPoint: Computer-based learning with More than 10 computers: Instructor Voice Amplification System combination of lecture/PowerPoint: Use videos (purchased or online) Do not use: Interested in having one: to augment instruction: Projector Connected to a Classroom Computer Currently use one: Don't have access or choose not to: Curriculum Use it infrequently: No written curriculum: Use it two to five times per week: Textbook only: PowerPoint (or other visual presentation software) Purchased: No interest: Make my own: Would like to learn: Currently use it as an adjunct to teaching: Combination of purchased, textbook Currently use it as primary teaching tool: and/or make my own: Whiteboard or Interactive Pad Digital Still Camera Use one or the other almost every day: Use for general purpose: Use it infrequently: Use for augmenting curriculum: Interactive Classroom Feedback System (allows students Video Camera to respond to questions electronically) Use for general purpose: None but interested: Use for augmenting curriculum: Use infrequently: Video Editing and Ripping Use frequently: Do not edit videos: Compute Familiar with editing process: Do not have one: Skilled at editing: Instructor only: Ability to rip videos and put them

and editing commercial videos for use in classroom presentations.) In preparation for the presentation, Ashton and colleagues conducted an informal survey of the participants to determine what technology was currently being used. Of the 400 participants, 278 responded. (This was a unique opportunity to poll a sample of instructors from across the nation. Although they were automotive instructors, Ashton believed that a poll of other CTE instructors would yield similar results.) They were pleased to learn that only 19 out of 278 did not have access to the use of a projector which would make all of the education tools described easily available to them. The survey results show that automotive instructors around the country are using technology in their classrooms to varying degrees.

Access within the school but not close:

Technology can be an integral partner in helping to improve student outcomes by engaging students in their learning and facilitating the transference of knowledge from teacher to student. In Ashton's program, technology is helping students pay more attention to what is being taught, is encouraging their participation by bringing dynamism to the content, and is helping to improve student outcomes overall.

### Denis Ashton

is an administrator and instructor of heavy duty automotive technology at EVIT. He has presented at AYES and ACTE conferences and has written two books. The books and his PowerPoint-based curriculum are available at www.abariscurriculum.com. He can be contacted through his Web site.

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into classroom presentations:

**ACTE** Interested in exploring this topic

# Developing **Technical Skill Assessments**

THERE HAS BEEN VIGOROUS DEBATE REGARDING THE MERITS OF VARIOUS ASSESSMENT APPROACHES AND **ALTERNATIVES TO NATIONAL** OR INDUSTRY EXAMS. THE **ENTIRE FIELD IS WORKING** HARD TO INCREASE THE **FOCUS ON TECHNICAL SKILL MEASUREMENT** IN ORDER TO PROVIDE **CLEAR EVIDENCE THAT CTE PROVIDES A UNIQUE VALUE TO STUDENTS.** 



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**Spotlight Series** 

**NE OF THE BIGGEST CHALLENGES FACING THE CAREER AND TECHNICAL EDUCATION (CTE) COMMUNITY** AS IT WORKS TO IMPLEMENT THE **2006 PERKINS ACT** is responding to more rigorous requirements for reporting on CTE students' technical skill attainment. The law requires that measures be valid and reliable, and the technical skill attainment measure is enhanced to focus on "career and technical skill proficiencies, including student achievement on technical assessments, that are aligned with industry-recognized standards, if

available and appropriate." The U.S. Department of Education suggested in non-regulatory guidance that states and locals use the number of CTE concentrators who passed technical skill assessments aligned with industryrecognized standards as their performance indicator to fulfill the new requirements. While there has been vigorous debate regarding the merits of various assessment approaches and alternatives to national or industry exams, 44 states have decided to use the non-regulatory guidance at the secondary level, and 33 states have made that decision at the postsecondary level. Even though some states have chosen a slightly different approach, the entire field is working hard to increase the focus on technical skill measurement in order to provide clear evidence that CTE provides a unique value to students.

Unfortunately, very few states have such a system of technical assessments in place. While efforts are under way at the national level to provide some assistance, many states are moving forward with efforts to increase their ability to accurately measure the skills students gain in CTE programs. Some states are working to develop a set of assessments based on their own state standards, some are looking to align with already existing national or industry assessments, and others are taking a combination approach. Georgia already had an assessment system in place at the postsecondary level, but there was no established, statewide technical skill measurement system in place for high school students. When the new Perkins law was passed, the state embraced the challenge to build an assessment system from scratch and began working furiously.

Mamie Hanson, grants program consultant with the Georgia Department of Education's Division of Career, Technical and Agricultural Education (CTAE), said state administrators "did a lot of research to see which approach would yield the best results for students" and considered a variety of assessment options. The question they ultimately decided to measure was, "Does a student have the necessary skills to enter the career pathway or occupational area and be successful?" It was determined that a more sustainable level of technical skill attainment could be measured after a student had completed a sequence of courses, which led the state toward an end-of-pathway assessment system aligned with its new "Peach State Pathways."

During the 2007-2008 school year, Georgia began identifying a system of

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valid and reliable third-party assessments that evaluate industry-based standards. Beginning with eight career pathways, Subject Matter Expert (SME) Panels were established to engage in a process of identifying or developing appropriate technical assessments. Expert panels included four to six representatives from secondary and postsecondary education, business and industry and CTE administration. Team members accomplished these tasks over four work sessions.

The first step was for the panels to identify existing assessments corresponding to the career pathway. The panels were charged with researching and evaluating current assessments, ensuring that exams were valid and reliable, and using 43 criteria to determine exams' usability. Some of the criteria included:

- Is the assessment based on a set of industry competencies or credentialing standards?
- What percentage of the competencies on the assessment aligns with Georgia Performance Standards (GPS)?
- · Are tests current and is there a revision schedule?
- Are there appropriate testing security procedures in place?
- Are there appropriate accommodations for special populations?
- Can the test be administered online and through paper copies?
- Can the testing organization provide accurate feedback regarding performance for local and state reporting?
- Is the exam reasonably priced?

The final step was for the panel to review information gathered and choose to use an existing assessment in its current form or to modify it to better align with GPS. After an extensive evaluation process, SME panels identified eight endof-pathway assessments for Phase I Career Pathways. Pilot testing for this first set of pathway assessments will be undertaken



in January 2009. Exams will be offered in an online, multiple-choice format and will typically be 90 minutes in length. The process used for the first eight pathways also began again in the fall of 2008 with another set of 10 pathways. The formation of expert panels, research into existing assessments, identification of appropriate assessments and assessment piloting will be repeated each year to ensure complete coverage of all 54 of Georgia's career pathways within five years.

Exams will be administered to pathway completers, which are those students who complete three designated courses within a career pathway. Local CTAE administrators will work with instructors to identify eligible students. Georgia's CTAE Resource Network, a clearinghouse which supports a variety of curriculum, assessment and professional development activities, will assist state personnel with test facilitation activities at the local level. The network will provide proctor training, access to online testing procedures, and a means of issuing

and tracking certificates and licensures obtained by students.

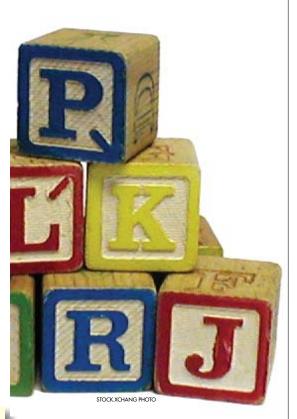
While it is estimated that less than 1 percent of the state's CTE students will take technical skill assessments during the 2008-2009 school year, this number will increase as additional assessments are identified or developed. Hanson emphasized that the state hopes to offer students national certifications in as many areas as possible to increase the value of participation. Where those national certifications are not available, state certifications with industry endorsements will be developed. This will ensure that the skills students gain in Georgia's CTE programs will be clearly recognized and valued by employers across the state, which is one of the most important goals of any assessment system.

See this month's Research Report on page 52 for a comprehensive look at the progress that states are making in developing secondary CTE standards systems.

By Sally M. McCombie

## High School Child Development Courses Provide a Valuable Apprenticeship

PARENTING INSTRUCTION, A RESPONSIBILITY THAT HAD PREVIOUSLY RESTED IN THE HOME, HAS BECOME PART OF EDUCATIONAL **CURRICULA.** 



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holds a doctorate and is coordinator of family and consumer sciences education at Indiana University of Pennsylvania. She can be contacted at Sally.McCombie@iup.edu.

HE CURRENT MEDIA ARE **LADEN WITH REPORTS OF** THE MANY SIGNIFICANT **PROBLEMS FACING TODAY'S** 

**YOUTH.** In fact, parenting has become a national topic of discussion. Today's parents are inundated with advice on how to address, intervene and prevent various problems and how to intervene effectively, if necessary. Professionals in numerous fields—including psychology, medicine and religion—have proposed tips and strategies. Various human service agencies and educational institutions offer workshops and seminars on parenting topics. Parenting instruction, a responsibility that had previously rested in the home, has become part of educational curricula.

Courses in child development are offered for high school students in Pennsylvania as well as in other states. Child development programs consist of educational courses that provide students with the knowledge of the physical, emotional, social and intellectual development of children. These programs are intended to enhance knowledge in child development, change behavior when interacting with children, and influence attitudes toward child rearing.

The author visits high school programs across the state of Pennsylvania to supervise student teachers in family and consumer sciences. She has observed much diversity in the way child development programs are structured. She surveyed 90 Pennsylvania junior and senior high school child development

teachers in 2000 and 2001. Of the 86 teachers who reported that child development classes were offered, 72 percent indicated that the course was delivered using a combination of didactic instruction and supervised interaction with preschool children in a child development laboratory. Seventy-four percent of these laboratory experiences take place in the secondary classroom. The high school students study, design and implement age-appropriate learning activities to explore and understand the development of preschool children.

## Learning in the Lab

A child development laboratory provides direct experience with young children. Most programs are part-day and children are recruited from the community to participate. Teachers have taken courses in early childhood care and development as a part of their certification requirements. They are skilled in the use of developmentally appropriate practices and positive guidance in the preschool

While there is some variation across school districts, the secondary students typically receives instruction in these concepts, as well as in basic child development theory and age/stage characteristics prior to participating in the lab. During their lab participation, the students have experiences that frequently include observing, interacting with and guiding the children as well as planning activities, preparing the classroom and evaluating the day. The Pennsylvania Department

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